## MANAGEMENT OF MEDICAL EMERGENCIES

#### I. INTRODUCTION

Emergency situations involving clients and/or staff may occur any time; therefore, all agencies must have written plans and protocols/ operating procedures for the management of on-site medical and non-medical emergencies. There must be a procedure in place for maintenance of emergency resuscitative drugs, emergency medical supplies, and emergency medical equipment including an AED. All staff should be trained in emergency procedures and must be familiar with the plans. Health care providers have a responsibility to assure that clients are appropriately served in an emergency situation. It is essential that clinical staff are fluent in the location and use of emergency equipment and licensed medical staff providing direct patient care services must be trained in CPR and hold current certification.

Included here are general clinical guidelines for responding to the most common emergencies seen in an ambulatory care setting. These guidelines are not administrative guidelines and do not outline the content or maintenance schedule of emergency kits or equipment nor do they outline staff roles or emergency/code activation procedures for a center nor training or certifications needs.

These guidelines are intended as a reference only and health care providers should consider the specific circumstances of each patient encountered during an emergency and use his/her clinical judgment in providing care. The information is meant to supplement principles of good clinical management. Recommendations for any patient's medical care should consider not only the specific circumstances of that patient but also the resources available during the emergency.

## II. VASOVAGAL REACTIONS/SYNCOPE (FAINTING)

Vasovagal reaction is a reflex parasympathetic response to a variety of stimuli including pain that leads to a sudden drop in heart rate and blood pressure leading to reduced blood flow to the brain. A vasovagal reaction can progress to a transient loss of consciousness (syncope) and may provoke seizure-like activity secondary to inadequate oxygen perfusion of the brain. Common causes of a vasovagal reaction include pain, fear, anxiety, breath-holding or prolonged Valsalva maneuver, prolonged standing, or abrupt positional changes.

These episodes are usually transient and self-resolving. However, there is a risk of harm from falling, so management of a client should focus not only on optimizing blood flow to the brain, but also on helping to prevent or minimize the risk of injury. Both of these are best achieved through early recognition and management of signs of a vasovagal response.

Medical conditions other than vasovagal syncope can also cause syncope. These include cardiac arrhythmia, hyperventilation, hypoglycemia, local anesthetic toxicity or allergy (such as can happen if cervical block given for IUD insertion), stroke, or hypovolemia due to a large blood loss or dehydration. Most of these are **not** self-

resolving and can lead to life-threatening loss of oxygenation to the brain and heart. It is important, therefore, that providers assess for the presence or these conditions when managing a client that is experiencing a syncopal episode.

# A. Signs and Symptoms of Vasovagal Response

- 1) The client experiencing a vasovagal response may report the following:
  - a) A feeling of lightheadedness, dizziness, or of feeling faint or like s/he is going to "pass out"
  - b) Nausea
  - c) Ringing in the ears/sense that sounds are far away
  - d) Blurred or reduced vision (spots, dark, grey tone, or tunnel-vision)
  - e) A feeling of restlessness or of sudden fatigue
  - f) Sudden sensation of feeling hot/flushed or cold
- 2) The staff member or provider may note the following in a client who is having a vasovagal response:
  - a) Slow and/or weak pulse (heart rate of 60 or less)
  - b) Low blood pressure (although pressure may be normal)
  - c) Cool and clammy skin, sweating
  - d) Facial pallor
  - e) Dilated pupils
  - f) Vomiting
  - g) Yawning
  - h) Seizure-like activity, with tonic-clonic muscle movements

## B. Management of a Client with Vasovagal Response

If a client reports the above symptoms or exhibits these or a syncopal episode is suspected:

- 1) Remain with the client, reassure and calm the client, and protect from injury.
- Do not attempt to ambulate with the client.
- 3) Assist to a supine position.
  - a) If client standing or sitting: immediately assist to a supine position on the floor and elevate legs 8-10 inches.
  - b) If client on exam table: immediately assist into supine or Trendelenburg position on table.
- 4) Summon help and emergency supplies to the scene if needed.
- 5) Monitor and record blood pressure and pulse and repeat at least every 5 minutes. If the patient loses consciousness, note the time.
- 6) If victim is found or becomes unconscious, assess circulation, airway and breathing and progress as needed into full CPR (by staff with CPR/AED certification) per the most updated American Heart Association recommendations/guidelines which can be found at:

- https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/. Follow "Adult BLS Algorithm" (Appendix A) or "Pediatric BLS Algorithm" (Appendix B).
- 7) If cause of fainting episode is unknown, check for medic alert, allergies, existing medical conditions, and current medications and address appropriately (e.g. for client with diabetes, assess glucose status and manage hypoglycemia if present).
- 8) If victim is conscious, encourage slow deep breathing. Consider activating an ammonia capsule/wipe and quickly move the capsule/wipe back and forth under patient nostrils. DO NOT use ammonia capsule/wipe if the client's face is flushed or if victim is having respiratory failure or has a history of respiratory disease.
- 9) If unconscious or no improvement within one minute, apply O2 via simple face mask at 5-10 liters/minute or via nasal cannula at 2-6 liters/min.
- 10) Activate emergency response system is worsening status or status not improving.
  - a) For conscious patient, if no improvement after 5 minutes or condition becomes worse, call 911.
  - For unconscious patient, no improvement in one minute or condition become worse, call 911 and continuously assess for need to progress to CPR.
- 11) Post syncopal episode, continue to monitor until vitals stabilize and client reports feeling better and is able to respond appropriately to environment/situation/questions.
  - a) If the client is fully conscious, there are no signs of respiratory distress and client is alert and talking juice or water can be offered.
  - b) Assure pulse and blood pressure have returned to normal range and client is asymptomatic when standing before discharging client.
  - c) Advise client to have a friend or family member accompany him/her home.
  - d) Advise client to see his/her primary care provider or refer for further evaluation if the vasovagal reaction was severe, led to convulsions, recurs frequently, or was not associated with a procedure or event.

# III. ACUTE ALLERGIC REACTION/ANAPHYLAXIS

Anaphylaxis is an acute, severe, life-threatening systemic reaction which can occur in a person who has a hypersensitivity to a specific antigen (although not all anaphylaxis reactions are immunologic). The most common anaphylactic reactions are to food, medication (including vaccine components) and insect bites. Anaphylaxis occurs when the immune system releases a flood of mast cell and basophil-derived inflammatory mediators into the circulation leading to-life threatening respiratory distress, usually followed by vascular collapse and shock. Anaphylaxis requires immediate medical treatment, including a prompt injection of epinephrine and activation of emergency response system. If not treated properly, anaphylaxis can be fatal.

While reactions can occur days after an exposure, most reactions occur within 30 minutes of the exposure to the specific antigen. Certain individuals are more likely to have an anaphylactic reaction including those with allergies, asthma, or a family history of anaphylaxis. Those individuals with a history of anaphylaxis are also more likely to have another anaphylactic reaction. Anyone at high risk of anaphylaxis should carry emergency epinephrine injection (e.g. EpiPen) with them at all times. Patients receiving vaccines should be assessed for possible allergic reactions/anaphylaxis prior to receiving the vaccine.

# A. Signs and Symptoms of Anaphylactic Reaction

- 1) A client experiencing an anaphylactic reaction may report:
  - a) Tingling or numbness of lips
  - b) generalized tingling/itching/burning skin
  - c) A feeling of restlessness or confusion
  - d) Difficulty breathing
- 2) The staff member or provider may note the following in a client who is having a vasovagal response:
  - a) Flush or pallor
  - b) Hives/rash
  - c) Apprehension, confusion, agitation
  - d) Acute onset coughing/sneezing
  - e) Wheezing/difficulty breathing/respiratory distress
  - f) Cold, clammy skin
  - g) Involuntary voiding
  - h) Vomiting and diarrhea
  - i) Edema of lips and periorbital area
  - j) Rapid pulse
  - k) Fall in blood pressure
  - I) Loss of consciousness

#### B. Management of a Client with Anaphylactic Reaction

If a client reports the above symptoms or exhibits these or a syncopal episode is suspected:

- 1) Remain with the victim and call for assistance and emergency supplies including epinephrine.
- 2) Place client in supine position (or Trendelenburg if able); elevate legs, loosen clothing.
- Call 911 and specify that anaphylaxis is suspected.
- 4) Do not offer food or fluids or oral medications give nothing via mouth.
- 5) Administer Aqueous Adrenaline (Epinephrine).
  - a) 0.2-0.5ml of 1:1000 concentration Epinephrine IM into mid outer aspect of thigh.
    - i) 0.01 mg/kg of body weight up to 0.5mg maximum.

OR

- b) EpiPen IM into the mid-outer aspect of the thigh.
  - i) EpiPen Jr (0.15 mg) for 15-30kg (33-66 lbs.)
  - ii) EpiPen (0.30 mg) for >30 kg (>66 lbs.)
- c) Massage injection site for 10 seconds.
- d) May repeat in 5-15 minutes to max of 3 doses.
- e) Each dose must not exceed 0.5ml.
- f) Avoid IV administration of IM dose dosing concentration is different for IV administration and giving IM dose intravascularly can lead to fatal cardiovascular events.
- g) Document administration time, dose, vital signs and response to medication (changes in signs and symptoms). Provide documentation to paramedics.
- h) Anyone who receives Epinephrine should be transported via ambulance for follow up emergency care even if they have improved by the time response team arrives.
- 6) Check pulse, blood pressure, mental status, skin color and breath sounds. Repeat examination every 1-3 minutes until they improve or until client is transported.
- 7) Administer O2 via simple oxygen mask at 5-10 liters/min. or via nasal cannula at 2-6 liters/min.
- 8) If victim is found or becomes unconscious, assess circulation, airway and breathing and progress as needed into full CPR (by staff with CPR/AED certification) per the most updated American Heart Association recommendations/guidelines which can be found at: https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/. Follow "Adult BLS Algorithm" (Appendix A) or "Pediatric BLS Algorithm" (Appendix B).
- 9) Counsel client/family on increased risk of repeat anaphylaxis within 1-72 hours after initial incident. This is referred to as biphasic anaphylaxis.
- 10) Counsel client/family regarding importance of reporting drug or other allergies and avoidance of allergy-inducing agents in future.
- 11) Suggest carrying identification card or bracelet identifying serious allergies.

## IV. CARDIAC ARREST

Cardiac arrest is the abrupt cessation of heart function that occurs when the heart's electrical system malfunctions. This results in the absence of blood circulation. Cardiac arrest stops blood from flowing to vital organs, depriving them of oxygen, and, if left untreated, results in death.

Each year, more than 350,000 emergency medical services-assessed out-of-hospital cardiac arrests occur in the United States with 90% mortality. Cardiac arrest may be reversed if cardiopulmonary resuscitation (CPR) is performed and a defibrillator is used to shock the heart and restore a normal heart rhythm within a few minutes.

While a "heart attack" or myocardial infarction can lead to cardiac arrest, cardiac arrest is not the same thing and can occur in a person who may or may not have diagnosed heart disease.

Respiratory arrest (resulting from decreased respiratory effort or airway obstruction such as results from choking or drowning) is different than cardiac arrest – but, if unrelieved, one will inevitably lead to the other.

#### Causes of cardiac arrest:

- Cardiac disease
- Respiratory failure/arrest Inadequate ventilation leading to hypoxia
- Anaphylaxis
- Pulmonary embolus
- Shock

In critically or terminally ill patients, cardiac arrest is often preceded by a period of clinical deterioration with rapid, shallow breathing, arterial hypotension, and a progressive decrease in mental alertness. In sudden cardiac arrest, collapse occurs without warning, occasionally accompanied by a brief seizure.

# A. Signs and Symptoms of Cardiac Arrest

- 1) A staff or provider will notice the following in a client in cardiac arrest:
  - a) Absent pulse
  - b) Breathing absent or abnormal

#### B. Management of a Client in Cardiac Arrest

Each site is responsible for ensuring staff is trained in emergency response and that key staff members have CPR certification that is current as well as for making sure AED equipment is in working order, accessible and available and for ensuring that necessary medications are stocked, within their expiration date, accessible and available.

- 1) Stay with client and call for help, ask for emergency kit, oxygen and AED.
- 2) Protect client from falls place in a supine position.
- 3) If CPR/AED certified, initiate CPR, if not CPR/AED certified, summon a CPR/AED certified provider.

#### (For staff with CPR/AED certification)

- While you initiate CPR, ask other staff to call 911
- 5) Follow "Adult BLS Algorithm" (Appendix A) or "Pediatric BLS Algorithm" (Appendix B).
- 6) If severe anaphylactic reaction causes respiratory arrest, continue protocol per Anaphylaxis above.
- 7) If vomiting occurs and oxygen mask in use, remove mask, turn patient onto side, clear mouth, and resume ventilation.
- 8) Continue resuscitation efforts, per algorithm, until paramedics arrive.

#### 9) If indicated use AED:

- a) Refer to Step by Step directions on AED device.
- b) Contraindications:
  - i) Children under age 1 year (estimate of age based upon information available to individual operating AED).
  - ii) Patient is breathing, responsive, speaking, or making intentional movements.
- c) Precautions: Refer to chart that accompanies the AED machine.
  - i) Wet conditions- Make sure the patient and environment are dry (this includes removing transdermal patches (ie. nitroglycerine paste) from the chest with a dry cloth).
  - ii) Metal surfaces Make sure the patient is not touching any metal surfaces.
  - iii) Combustible materials or hazardous (explosive) environment Remove the patient, if possible, from an area that presents a hazard.
- d) Do not touch the patient while the AED is assessing, charging, or shocking the patient.
- e) Ensure the patient is "clear" (no one is touching the patient) when the shock is delivered.
- f) If the patient has an internal pacemaker/defibrillator, position the pad one hand's width (approximately 5 inches) from the pacemaker/defibrillator site.
- 10) Never defibrillate while moving the patient.
- 11) All clients who have received CPR should be transported via ambulance for follow up emergency care even if they have improved by the time response team arrives.

#### V. SHOCK

Shock is a state of widespread tissue/organ hypoperfusion or hypoxemia that leads to cellular dysfunction and cellular death. This can result in organ failure, cardiopulmonary arrest and death. Shock can be a result of many conditions such as hemorrhage, infection, dehydration, electrolyte imbalance, anaphylaxis, cardiac or respiratory arrest. Early recognition and management of these conditions can reduce the risk of shock.

Shock can be classified by cause:

- Hypovolemic: Loss of blood or fluid
- Cardiogenic: Cardiac arrest
- Pulmonary: Inadequate oxygen intake
- Obstructive: Mechanical interference with ventricular filling or emptying
- Neurogenic: Vasomotor instability (loss of tone in blood vessels)
- Septic: Infectious process or toxins from pathogens

A client in shock needs immediate transportation to a hospital able to manage shock victims.

# A. Signs and Symptoms of Shock

- 1) The staff member or provider may note the following in a client who is in shock:
  - a) Tachycardia heart rate 100+
  - b) Skin cool, clammy
  - c) Pallor around mouth or cyanosis
  - d) Hypotension Blood pressure less than 80 systolic, 50 diastolic
  - e) Altered consciousness or awareness

## B. Management of Client in Shock

- 1) Stay with the client and call for help. If not already at patient side, ask for emergency kit, oxygen and AED.
- 2) Place client in modified Trendelenburg position. Raise feet above heart level but keep torso flat. Rest legs on pillow(s) so they are slightly higher than heart. Regular Trendelenburg position is not recommended for a client in shock.
- 3) Have staff call 911 and prepare for transfer.
- 4) Provide oxygen via non-rebreather face mask at 100% (10-15 liters/min).
- 5) Continuously monitor client including vital signs at least every 3-5 minutes.
- 6) If site has the ability/equipment start a large bore IV and infuse IV fluids.
- 7) If shock due to hemorrhage, attempt to stop bleeding (see guideline for Hemorrhage).
- 8) If anaphylaxis treat per Anaphylaxis guideline above.
- 9) Keep warm turn heat on/up; cover with blankets.
- 10) Nothing by mouth/monitor for vomiting and protect airway.
- If shock is severe, observe client closely for cardiopulmonary arrest and manage per Cardiac Arrest guideline.
- 12) If victim is found or becomes unconscious, assess circulation, airway and breathing and progress as needed into full CPR (by staff with CPR/AED certification) per the most updated American Heart Association recommendations/guidelines which can be found at: https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/. Follow "Adult BLS Algorithm" (Appendix A) or "Pediatric BLS Algorithm" (Appendix B).

#### VI. HEMORRHAGE

Simple, uncontrolled hemorrhage can lead to the development of hypovolemia and shock. Primary management of hemorrhage involves in identifying the source of the bleeding and trying to stem it.

## A. Management of the Client with Hemorrhage

1) Stay with the client and call for help. If not already at patient side, ask for emergency kit, oxygen and AED.

- 2) Assist client to a safe place where they can easily and safely be placed in a supine position should they progress into a state of unconsciousness.
- 3) Identify source of bleeding and try to slow/stop
  - a) If source of bleeding is a wound, pressure should be applied with a gloved hand and a pad.
  - b) In the case of cervical bleeding compression can be applied with ring forceps.
  - c) If wound is in upper extremity, that extremity should be elevated above the head.
- 4) If bleeding is profuse and/or does not stop with above, call 911 and activate emergency system.
- 5) If site has the ability to do so, initiate large gauge IV and infuse fluids Administer IV fluid therapy with 0.9% Normal Saline or Ringers Lactate solution.
- 6) Monitor and record blood pressure and pulse and repeat at least every 5 minutes.
- 7) Monitor for signs of shock and manage shock refer to Shock guidelines.
- 8) If victim is found or becomes unconscious, assess circulation, airway and breathing and progress as needed into full CPR (by staff with CPR/AED certification) per the most updated American Heart Association recommendations/guidelines which can be found at: https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/. Follow "Adult BLS Algorithm" (Appendix A) or "Pediatric BLS Algorithm" (Appendix B).

## VII. RESPIRATORY DIFFICULTIES/RESPIRATORY DEPRESSION

There are various conditions that can cause respiratory difficulties including acute causes such as an allergic reaction, drug overdose, injury, blood clot, or choking or from chronic conditions such as asthma or COPD.

While the body can often compensate for brief interruptions of oxygen, the interruption of pulmonary gas exchange for > 5 min may irreversibly damage vital organs, especially the brain. The time needed for permanent damage to develop may be shorter in the very young, the very old or those who have underlying illness.

Treatment/management of the underlying cause of respiratory difficulty is usually necessary to relieve the respiratory difficulty and prevent permanent damage or death.

#### A. Signs and Symptoms of Respiratory Distress

- 1) A client experiencing respiratory difficulties may report:
  - a) Feeling short of breath/unable to get a full breath
  - b) Tingling or numbness of lips
  - c) Dizziness

- d) A feeling of restlessness or confusion
- e) Chest pain
- f) Nausea
- 2) The staff member or provider may note the following in a client who is having respiratory difficulties:
  - a) Apprehension, confusion, agitation
  - b) Difficulty speaking
  - c) Tachypnea breathing rapidly
  - d) Depressed respiratory rate (<8 breaths/minute)
  - e) Client making universal choking sign (hands around neck)
  - f) Inability to breathe while lying down
  - g) Cyanosis bluish tinge to lips, nails
  - h) Acute onset coughing
  - i) Coughing blood
  - j) Rapid or irregular heart rate
  - k) Gurgling/wheezing/whistling sounds
  - I) Chest moving in unusual way

# B. Management of Client with Respiratory Difficulties/Respiratory Depression

- 1) Stay with client and summon help including CPR/AED certified provider and emergency kit, oxygen and AED.
- 2) Loosen any tight clothing.
- 3) Assess for cause of respiratory difficulty and assist patient in taking prescribed medication if appropriate (e.g. asthma inhaler).
- 4) If airway obstruction with foreign object is suspected or respiratory difficulty continues or if client becomes unconscious call 911.
- 5) If airway obstruction suspected or confirmed:
  - a) If client is moving air or coughing, stay with client, keep them calm and await to see if spontaneous coughing effort clears airway.
  - b) If client is unable to exchange air, is unable to cough or is unable to speak or if they are making the choking sign:
    - i) Give 5 back blows: bend the person forward at the waist and give 5 back blows between the shoulder blades with the heel of one hand.
    - ii) If back blows do not relieve obstruction, give 5 abdominal thrusts (Heimlich maneuver):
      - (1) Wrap arms around patient from behind and place a fist with the thumb side against the middle of the person's abdomen, just above the navel.
      - (2) Cover your fist with your other hand.
      - (3) Give 5 quick, upward abdominal thrusts.
      - (4) Repeat until object dislodged or client becomes unconscious.
  - c) If client loses consciousness:
    - Lower to floor.

- ii) Check for object in mouth:
  - (1) if visible try to grasp or sweep out of mouth taking care not to lode further (this should only be done if client has lost consciousness).
  - (2) If no object visible, open the client's airway using the head-tilt/chin-lift or jaw-thrust.
    - (a) attempt two provide two rescue breaths.
    - (b) If breaths work (visible chest rise), assess for spontaneous breathing and for pulse if no spontaneous breathing, continue with rescue breathing or initiate CPR if appropriate.
    - (c) If breaths do not work, attempt modified abdominal thrusts
      - (i) Straddle the casualty's thighs.
      - (ii) Place the heel of one hand against the casualty's abdomen on the midline slightly above his navel and well below his xiphoid process. (This is the same location as for the standing abdominal thrust.)
      - (iii) Place your other hand on top of the hand on the casualty's abdomen. Fingers can be interlaced or extended away from your body.
      - (iv) Press down with an inward and upward thrust. Keep your arms straight and do not push to either side. Use your body weight to help you perform the thrust. After the thrust, release the pressure on the abdominal area by leaning back.
      - (v) If the thrust causes the casualty to vomit, turn his head to one side and clear the vomitus from his mouth. Then check the casualty for breathing.
    - (d) Continue doing 5 abdominal thrusts, check mouth, then two rescue breaths). Continue sequence until you can get air into the lungs or until the ambulance comes.
    - (e) Once successful, administer oxygen via non-rebreather mask at 100% (10-15 liter/ min) and assess for cardiopulmonary arrest.
- d) If client goes into cardiac arrest, progress as needed into full CPR (by staff with CPR/AED certification) per the most updated American Heart Association recommendations/guidelines which can be found at: https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/. Follow "Adult BLS Algorithm" (Appendix A) or "Pediatric BLS Algorithm" (Appendix B).
- 6) If opiate overdose suspected or confirmed:
  - a) Administer naloxone (Narcan). For a patient with known or suspected opioid overdose who has a definite pulse but no normal breathing or only gasping, in addition to providing standard BLS care, it is reasonable for

- appropriately trained BLS healthcare providers to administer intramuscular or intranasal naloxone.
- Naloxone is a lifesaving drug that can reverse an opioid overdose by restoring breathing. It has no effect on someone who hasn't taken opioids.
  It is safe for children and pregnant women.
  - i) Intramuscular or Subcutaneous
    - (1) 0.4 to 0.8 mg via IM or subcutaneous injection.
    - (2) Doses may be repeated every 2-3 minutes as needed up to total dose of 10 mg.
    - (3) For the Evzio auto-injector: Pull the device apart and follow the instructions.
  - ii) Nasal Spray
    - (1) Tilt the person's head back while supporting their neck with one hand.
    - (2) Insert the device in one nostril with the other hand Push up briskly on the plunger with your thumb.
    - (3) If additional doses are available, may repeat dose in alternate nostrils every 2 to 3 minutes as needed.
  - iii) Intranasal Administration
    - (1) Remove the yellow cap atop the plastic tube and screw the atomizer on.
    - (2) Remove the bottom yellow cap and the red cap from the vial; screw the vial into the bottom of the tube until it catches.
    - (3) Tilt the client's head back and spray half the vial up each nostril by pushing the vial up through the tube.
    - (4) Dose can be repeat in 2-3 minutes.
- c) Document administration route time, dose, vital signs and response to medication (changes in signs and symptoms) and provide this information to paramedics.
- d) Once client is breathing at >8 breaths/minute on own, administer oxygen via non-rebreather mask at 100% (10-15 liter/ min) and assess for cardiopulmonary arrest. Monitor for vomiting if client vomits, tilt head to side, clear vomitus and reposition mask once.
- e) If client goes into cardiac arrest, progress as needed into full CPR (by staff with CPR/AED certification) per the most updated American Heart Association recommendations/guidelines which can be found at: https://eccguidelines.heart.org/index.php/circulation/cpr-ecc-guidelines-2/. Follow "Adult BLS Algorithm" (Appendix A) or "Pediatric BLS Algorithm" (Appendix B).
- f) For patients in cardiac arrest, medication administration is ineffective without concomitant chest compressions for drug delivery to the tissues, so naloxone administration may be considered after initiation of CPR if there is high suspicion for opiate overdose.

During any of these emergencies: Someone should stay with the client at all times and provide care until fully recovered or until emergency medical services team arrives. If an unforeseen and unavoidable situation requires that the client be left unattended, even briefly— s/he should be placed into the **recovery position**. Studies show some respiratory improvement in this position compared to a supine position. If the person is unresponsive and breathing normally, without any suspected spine, hip or pelvis injury, turn the victim to a lateral side-lying position. Extend one of the person's arms above the head and roll the body to the side so that the person's head rests on the extended arm. Once the person is on his or her side, bend both legs to stabilize the body.

#### **REFERENCES**

American Heart Association: http://www.heart.org

American Academy of Allergy, Asthma & Immunology

Prescriber's Digital Reference: <a href="http://www.pdr.net">http://www.pdr.net</a>